
U.S. Department of the Interior • U.S. Geological Survey

MINERAL INDUSTRY SURVEYS

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MANGANESE IN APRIL 1997

In April, reported consumption of manganese ore containing 35% or more manganese, exclusive of that at iron and steel plants, was 38,100 metric tons, which was a decrease of about 5% compared with that of the previous month, according to the U.S. Geological Survey. This brought the year to date total to 154,000 tons. These figures increase to 42,600 and 172,000 when estimates for annual respondents are added on the basis of 1994 data. Corresponding industry stocks of ore at the end of the month were estimated as 326,000 tons, which includes an estimate for annual respondents based on 1994 data. This was an increase of 3% in comparison with the corresponding figure for stocks at the end of March. (Data for the most recent 13 months are graphed on page 2.)

The next report of data on domestic consumption and stocks of manganese ferroalloys and metals will pertain to the January through March quarter of 1997.

Foreign trade data for April will appear in a subsequent report. The data for March tabulated in this report indicate that receipts were the greatest since May 1996 for manganese dioxide and since August 1996 for silicomanganese. Australia was the source of most of the dioxide and was leading supplier for silicomanganese. **Note:** For early availability, the March trade data appearing in this report were placed on FaxBack in preliminary form as of May 30. The FaxBack document number for these preliminary tables was 420203.

The Defense Logistics Agency (DLA), U.S. Department of Defense, reported for April a cash disposal from the National Defense Stockpile of 183 tons of silicomanganese under DLA-FERROMANGANESE-001, all to Advanced Alloys, Atlanta, GA. This reduced the remaining uncommitted inventory of

silicomanganese to zero.

In Canada, importation and inter-provincial trade in methylcyclopentadienyl manganese tricarbonyl (MMT) was banned. The ban, effective June 23, does not prohibit use of MMT, an octane-enhancing gasoline additive. Ethyl Corp. of Richmond, VA, supplier of MMT, subsequently filed a claim for \$250 million with the Canadian Department of Justice asserting a breach of obligations by the Canadian Government under the North American Free Trade Agreement. Provinces within Canada also have sued the Canadian Government claiming that the ban contravenes Canadian laws governing inter-provincial trade (Chemical Engineering, 1997).

France's ERAMET was raising to a majority position its shareholding in Compagnie Minière de l'Ogooué S.A. (COMILOG), which produces manganese ore from the Moanda Mine in Gabon. The increase from a 46% to a 61% share was being accomplished through acquisition by ERAMET of the 15% share held by South Africa's Gencor Ltd. (Metal Bulletin, 1997). The April 19 issue of the Skillings Mining Review presents the third of a set of articles about manganese in Gabon. This most recent article gives for the Moanda Mine its recent history and describes the operations and equipment for mining, beneficiation, and transport of ore (Gautier, 1997).

References Cited

- Chemical Engineering, 1997, Canada puts the brakes on MMT: Chemical Engineering, v. 104, no. 5, p. 62.
Gautier, R.P., 1997, The Cie. Minière de l'Ogooué: Skillings Mining Review, v. 86, no. 16, p. 4-13.
Metal Bulletin, 1997, Eramet increases stake in Comilog: April 28, p. 9.

TABLE 1
SELECTED U.S. FOREIGN TRADE IN MANGANESE 1/

(Metric tons, manganese content) 2/

	Imports for consumption			Exports		
	Ore and dioxide	Ferroalloy and metal	Total	Ore	Ferroalloy and metal	Total
1996:						
March	14,400	46,900	61,300	435	1,670	2,110
January-March	30,600	130,000	161,000	2,440	4,880	7,330
1997:						
January	14,900 3/	25,400	40,300	3,450	1,370	4,820
February	21,000 3/	22,300	43,300	2,580	1,060	3,630
March	18,100 3/	41,800 3/	59,900	2,920	1,270	4,190
Total	54,000	89,500	143,000	8,950	3,690	12,600

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ As reported except as estimated for imports of manganese dioxide and manganese waste and scrap and for exports from gross weights.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 2
U.S. IMPORTS FOR CONSUMPTION OF SILICOMANGANESE IN MARCH 1997 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Australia	11,400	8,270	\$4,830,000	16,800	11,900	\$7,180,000
Georgia	--	--	--	2,440	1,710	1,360,000
India	7,320	4,950	3,480,000	10,400	7,050	4,970,000
Mexico	2,250	1,460	1,070,000	6,800	4,430	3,220,000
Norway	--	--	--	277	169	267,000
South Africa	5,270	3,570	2,430,000	18,000	12,100	8,330,000
Spain	1,200	750	1,020,000	1,200	750	1,020,000
Venezuela	4,200	2,750	1,840,000	7,000	4,580	3,060,000
Total	31,700	21,800	14,700,000	62,900	42,700	29,400,000
Total, general imports	31,700	21,800	14,700,000	60,400	41,000	28,000,000

1/ Data are rounded to three significant digits; may not add to totals shown.

Source: Bureau of the Census.

TABLE 3
U.S. IMPORTS FOR CONSUMPTION OF FERROMANGANESE IN MARCH 1997 1/

(Metric tons)

Source	Gross weight	Mn content	Customs value	Year to date		
				Gross weight	Mn content	Customs value
Low carbon:						
Italy	213	191	\$311,000	675	605	\$1,030,000
Japan	--	--	--	1,500	1,210	1,320,000
Norway	170	22	127,000	175	26	130,000
South Africa	120	112	203,000	540	501	939,000
Total, low carbon	503	325	641,000	2,890	2,340	3,420,000
Total, general imports of low carbon	503	325	641,000	2,930	2,370	3,450,000
Medium carbon, 1%-2% C:						
Brazil	356	289	257,000	1,660	1,340	1,170,000
China	2,070	1,670	1,630,000	2,070	1,670	1,630,000
Japan	--	--	--	2,500	2,010	1,950,000
Mexico	3,230	2,590	2,290,000	8,270	6,640	5,930,000
Norway	149	34 2/	110,000	469	295	331,000
South Africa	--	--	--	120	94	112,000
Total, m.c., 1%-2% C	5,800	4,580	4,280,000	15,100	12,000	11,100,000
Total, general imports of m.c., 1%-2% C	5,800	4,580	4,280,000	15,100	12,000	11,100,000
Medium carbon, 2%-4% C:						
Canada	--	--	--	101	40	13,400
Total, m.c., 2%-4% C	--	--	--	101	40	13,400
Total, general imports of medium carbon	--	--	--	101	40	13,400
High carbon:						
Australia	7,490	5,280	2,140,000	11,500	8,350	3,650,000
Brazil	1,650	1,260	617,000	9,660	7,360	3,640,000
South Africa	9,620	7,570	3,950,000	17,300	13,600	7,160,000
Total, high carbon	18,800	14,100	6,710,000	38,400	29,300	14,400,000
Total, general imports of high carbon	18,800	14,100	6,710,000	38,400	29,300	14,400,000
Grand total	25,100	19,000	11,600,000	56,500	43,700	29,000,000
Grand total, general imports	25,100	19,000	11,600,000	56,500	43,700	29,000,000

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ All or part of these data have been referred to the Bureau of the Census for verification.

Source: Bureau of the Census.

TABLE 4
U.S. IMPORTS 1/ OF MANGANESE ORE (20% OR MORE MN) IN MARCH 1997 2/

(Metric tons)

Source	20% - 47% Mn		47% or more Mn		Total	
	Gross weight	Mn content	Gross weight	Mn content	Gross weight	Mn content
Australia	--	--	5,490	3,210 3/	5,490	3,210
Gabon	--	--	22,300	11,500	22,300	11,500
Mexico	1,690	644	401	268	2,090	912
Morocco	--	--	18	9	18	9
Total	1,690	644	28,200	15,000	29,900	15,600
Year to date:						
Australia	--	--	5,490	3,210	5,490	3,210
Belgium	--	--	6	5	6	5
Gabon	--	--	73,500	37,600	73,500	37,600
Mexico	19,800	7,400 4/	801	539	20,600	7,940
Morocco	--	--	18	9	18	9
Total	19,800	7,400	79,800	41,300	99,600	48,700

1/ Quantities for general imports and imports for consumption are identical.

2/ Data are rounded to three significant digits; may not add to totals shown.

3/ All or part of these data have been referred to the Bureau of the Census for verification.

4/ Includes U.S. Geological Survey's conversion of part of reported data (from apparent MnO2 content to Mn content).

Source: Bureau of the Census.

TABLE 5
U.S. IMPORTS FOR CONSUMPTION OF MANGANESE DIOXIDE AND MANGANESE METAL IN MARCH 1997 1/

(Metric tons, gross weight)

Source	Manganese dioxide				Manganese metal			
	Quantity	Customs value	Year to date		Unwrought		Other	
			Quantity	Customs value	Quantity	Year to date	Quantity	Year to date
Australia	3,170	\$4,470,000	6,020	\$8,420,000	--	--	--	--
Belgium	64	106,000	101	172,000	--	--	--	--
Brazil	64	88,400	127	177,000	--	--	--	--
Canada	--	--	--	--	--	--	(2/)	(2/)
China	170	198,000	335	396,000	80	500	242	242
France	--	--	--	--	--	--	2	17
Germany	--	--	24	121,000	--	--	2	2
Ireland	560	785,000	1,510	2,140,000	--	--	--	--
Japan	7	14,000	14	22,200	--	--	--	--
Mexico	--	--	--	--	--	--	--	2
South Africa	114	156,000	587	810,000	480	2,100	--	--
Ukraine	--	--	--	--	200	240	--	--
United Kingdom	--	--	(2/)	4,220	--	--	(2/)	(2/)
Total	4,150	5,820,000	8,720	12,300,000	760	2,840	246	264
Total, general imports	4,230	5,940,000	8,830	12,400,000	796	2,920	246	264

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Less than 1/2 unit.

Note: Imports for consumption of metallic manganese waste and scrap totaled 6 tons, of which 4 tons was from Mexico and 2 tons was from Canada, to give a year to date total of 80 tons.

Source: Bureau of the Census.

TABLE 6
U.S. EXPORTS OF MANGANESE ORE (20% OR MORE MN), FERROMANGANESE, SILICOMANGANESE, AND MANGANESE METAL BY COUNTRIES OF DESTINATION IN MARCH 1997 1/

(Metric tons, gross weight)

	Manganese ore		Ferromanganese, 2% or less C		Silicomanganese		Manganese metal 2/	
	March	Year to date	March	Year to date	March	Year to date	March	Year to date
Argentina	60	60	--	--	--	--	--	--
Australia	47	47	--	--	--	--	--	--
Belgium	--	1,380	--	--	--	--	38	325
Brazil	--	--	--	--	5	5	40	156
Canada	124	537	523	1,360	273	485	134	388
Colombia	--	--	--	--	--	--	--	3
France	--	656	--	--	--	--	66	183
Germany	--	--	--	--	--	--	64	64
Hong Kong	--	--	--	--	--	--	2	6
Israel	612	612	--	--	--	--	--	--
Italy	--	1,290	--	--	--	--	--	--
Japan	--	--	--	--	--	--	101	284
Korea, Republic of	--	--	--	--	--	--	--	31
Mexico	--	--	27	46	--	109	8	22
Netherlands	3,640	9,740	--	3	4	11	55	91
Norway	1,370	3,580	--	--	--	--	--	--
Spain	--	--	--	--	--	9	--	--
Sweden	--	--	--	--	--	--	--	20
Switzerland	--	--	--	16	--	--	--	--
Taiwan	--	--	--	--	--	--	--	(3/)
United Kingdom	--	6	--	--	--	--	--	270
Venezuela	--	--	8	13	--	--	--	--
Total	5,850	17,900	558	1,440	281	619	508	1,840

1/ Data are rounded to three significant digits; may not add to totals shown.

2/ Includes manganese-aluminum, some other alloys, and waste and scrap.

3/ Less than 1/2 unit.

Note: Exports of ferromanganese with more than 2% carbon totaled 165 tons, of which 165 tons went to Canada, and 1 ton went to Mexico, to give a year to date total of 379 tons.

Source: Bureau of the Census.

TABLE 7
U.S. FOREIGN TRADE IN SELECTED MANGANESE CHEMICALS IN MARCH 1997, BY CLASS 1/

Class	Gross weight (metric tons)	Value 3/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/	Year to date		
				Gross weight (metric tons)	Value 3/ (thousands)	Principal sources and destinations: gross weight (metric tons); value (thousands) 2/
Imports for consumption:						
Manganese oxides other than dioxide	108	\$258	Norway 40; \$27	279	\$601	South Africa 108; \$294
Sulfates, basket category, including manganese sulfate	2,930	1,760	Mexico 2,520; \$1,270	4,740	3,250	Mexico 3,850; \$2,150
Potassium permanganate	108	205	Czech Republic 90; \$173	396	776	Czech Republic 180; \$347
Manganites, manganates, and other permanganates	5	21	Germany 5; \$21	6	28	Germany 5; \$21
Exports:						
Manganese dioxide	365	481	Canada 119; \$53	943	928	Canada 524; \$208
Manganese oxides other than dioxide	591	593	Canada 401; \$182	2,210	2,040	Canada 1,260; \$579
Sulfates, basket category, including manganese sulfate	1,880	1,500	Canada 1,240; \$411	5,760	3,550	Canada 4,510; \$1,580
Potassium permanganate	19	41	Sweden 16; \$28	123	267	Ireland 47; \$98
Manganites, manganates, and other permanganates	25	249	Germany 18; \$127	61	607	Germany 36; \$254

1/ Data are rounded to three significant digits.

2/ For imports, Customs value; for exports, f.a.s. value.

Source: Bureau of the Census.